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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,390

03/28/2005

Michael Porat

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EXAMINER

MATTER, KRISTEN CLARETTE

ART UNIT

PAPER NUMBER

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,390	<b>Applicant(s)</b> PORAT, MICHAEL	
	<b>Examiner</b> KRISTEN C. MATTER	<b>Art Unit</b> 3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 6, 8-13, 15, 16, 18-20, 23, 27, and 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,8-13,15,16,18-20,23,27 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

This Action is in response to the amendment filed on 10/31/2008. No claims have been added or deleted. Currently, claims 1, 2, 6, 8-13, 15, 16, 18-20, 23, 27, and 28 are pending in the instant application and all have been amended in the response of 10/31/2008.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 6, 12, 16, 18-20, 23, and 28 are rejected under 35 U.S.C. 103(a) as obvious over van der Smissen et al. (US 4,807,614, herein referred to as “Smissen”) in view of Roy (US 2004/0261161).**

Regarding claims 1, 12, 16, 18, and 20, Smissen discloses a mask that enables one to breathe filtered air comprising a hood (1) that includes a bag of transparent film material (column 3, lines 48-50), a filter assembly (2, 4) connected to the bag (See Figure 1) and exhalation valve (5) worn in the area of a user's nose and/or mouth (see Figure 1) and reducing the air space within the hood (column 2, line 12), and a separate sealing means (9), not attached/connected to the bag, to seal around the neck.

Smissen does not clearly mention the material is impermeable to gases. However, examiner points to the fact that the hood has valves and filters for preventing contaminated air

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from entering the interior of the hood. This seems to clearly indicate that the bag is made of an impermeable film material, but regardless, it is obvious to one of skill in the art to make a hood for protecting against air toxins from a material that is impermeable to gases in order to protect the user from breathing unfiltered contaminants. The flexible nature of the hood inherently makes the hood foldable to pocket size.

Smissen also does not disclose a circumferential elastic sealing means (i.e., Smissen discloses a drawstring). However, Roy, in a protective suit in which air/water is prevented from entering the suit, discloses that drawstrings and elastic bands are equivalents (paragraph 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the drawstring of Smissen with an elastic band as taught by Roy because these two components are well known and commonly used as equivalents. Furthermore, it appears as though the device of Smissen would perform equally well with an circumferential elastic band. Note the term "band" implies a ring of material and therefore is considered to be circumferential. And since the bands are used on humans, it would be obvious to provide a snug comfortable fit that would not choke someone while still providing a good seal.

Regarding claim 6, Smissen discloses that the hood at least has to be transparent in the region of the eyes (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made any desired portions of the mask transparent as long as the eyes were included as a matter of design choice.

Regarding claim 19, Smissen as modified by Roy does not disclose 2 elastic bands. However, it is well known to those of ordinary skill in the art that elastic bands are replaceable and therefore it would have been an obvious design consideration to one of ordinary skill in the

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art at the time of the invention to have provided a second (i.e., spare) elastic band in the mask of Smissen in order to replace the band should it break, for example.

Regarding claim 23, Smissen does not specifically state that the hood is turned inside out after use, however, the flexible nature of the hood material inherently allows the hood to be turned inside out after removal from the head.

Regarding claim 28, the modified device disclosed by Smissen and Roy has all of the structural limitations needed to perform the recited method steps, including unfolding the hood and stretching an elastic sealing means over the hood and around the neck, and is fully capable of doing so. It would have been obvious to one of ordinary skill in the art at the time the invention was made, upon seeing the modified Smissen device, to perform the recited method steps of the instant claim 28.

**Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smissen and Roy as applied to claims 1, 6, 12, 16, 18-20, 23, and 28 above, and further in view of McGuinness (H1316).** Smissen does not disclose the hood as being made of a laminate of more than one plastic material. However, McGuinness discloses a similar protective hood formed from plastic laminates of more than one material (see column 2, lines 43-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the hood of Smissen from a plastic laminate as disclosed by McGuinness in order to more effectively protect the user from contaminants for extended periods of time. In addition, it appears as though the device disclosed by Smissen would perform equally well with a hood made of a plastic laminate as opposed to a single layer of plastic film.

**Claims 8 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smissen and Roy as applied to claims 1, 6, 12, 16, 18-20, 23, and 28 above, and further in view of Richardson (US 6,134,716).**

Regarding claim 27, Smissen discloses a connection piece for connection to source of air (which appears is enough to read on the instant claims). However, to the extent Smissen does not allow connection to a filter canister, examiner cites Richardson as teaching a foldable protective hood with a filter canister connected to the bag by connection means (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the filter strip (2) of Smissen with a connection piece and filter canister as taught by Richardson in order to allow the filter to be replaced as needed. In addition, it appears that the mask of Smissen would perform equally well with a filter canister and connection means.

Regarding claim 8, “Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)(citations omitted). In this case, Smissen as modified by Roy and Richardson discloses the filter member as sealed to surface of the hood but does not specifically state that it is heat sealed. It is well known to persons of ordinary skill in the art to heat seal plastic materials as an effective means for creating air-tight barriers and therefore would have been obvious to one of ordinary skill in the art to heat seal the filter assembly onto the bag.

**Claims 9-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smissen and Roy as applied to claims 1, 6, 12, 16, 18-20, 23, and 28 above, and further in view of Richardson (US 6,134,716) and Wen (US 6,681,765).**

Regarding claims 9 and 11, Smissen is silent as to a multilayered filter assembly. However, Richardson teaches a foldable protective hood with a multilayered filter canister connected to the bag by connection means (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the filter strip (2) of Smissen with a connection piece and filter canister as taught by Richardson in order to allow the filter to be replaced as needed. In addition, Richardson discloses a multilayer filter with active charcoal but is silent as to an antiseptic. Wen discloses, in a respiration mask, a multilayer filter with charcoal and antiseptic agents including clorohexdine (see column 2, lines 55-60). It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided Richardson's filter with an antiseptic agent as taught by Wen in order to more effectively protect the user from viruses and bacteria in the contaminated air. Furthermore, it appears as though the filter disclosed by Richardson would perform equally well with the antiseptic layer.

Regarding claim 10, Wen does not disclose that the charcoal is sandwiched between multiple layers of antiseptic agents. However, absent a critical teaching and/or a showing of unexpected results from having a charcoal layer sandwiched between the antiseptic layers, Examiner contends it would have been an obvious design consideration to one of ordinary skill in the art at the time of the invention to have used two antiseptic layers surrounding a charcoal layer in the multilayer filter disclosed by the modified Smissen reference in order to use multiple

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antiseptic agents for example or for more effective protection against viruses and bacteria.

Furthermore, it appears as though the device disclosed by Smissen, Roy, Richardson and Wen would perform equally well with the antiseptic layers sandwiching the charcoal layer.

Regarding claim 13, Richardson does not disclose the particle sizes filtered by the filter. However, the limitation "greater than 2 microns" includes macroparticles that would inherently be filtered out by the filter of Richardson (i.e., large dust). In any case, Wen discloses that the filter filters out particles in excess of 0.3 microns (column 5, line 60), which overlaps the claimed range of greater than 2 microns. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have designed the filter of Richardson to filter out particles greater than 2 microns in order to prevent contaminants from being breathed in by the user.

**Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smissen and Roy as applied to claims 1, 6, 12, 16, 18-20, 23, and 28 above, and further in view of Courtney (US 4,981,134).** The modified Smissen reference does not disclose the valve as being embedded in the filter. However, Courtney discloses a filter assembly for a face mask that includes an exhalation valve (7) embedded in the filter assembly (see Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a filter assembly as taught by Courtney in the modified mask of Smissen in order to allow the valve and filter to both be easily replaced as needed.



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***Response to Arguments***

Applicant's arguments filed 5/13/2008 have been fully considered but they are not persuasive.

In response to applicant's arguments that the sealing means of Richardson is attached or connected to the bag, examiner respectfully maintains that because the sealing means is removable, it's position with respect to the mask is not fixed (i.e., the sealing means can be slid throughout the sleeve even when being used to secure the mask and can subsequently be removed altogether) and therefore the sealing means can be considered to be not attached/connected to the bag. In addition, the sealing means is fully capable of being used without being inserted through the sleeve (i.e., if the wearer was in a hurry to don the hood and did not have time to thread the sealing means through the sleeve, the sealing means could be placed over the head and secured at any location around the neck of the wearer by securing the holder 62).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The balance of art cited is to show that it is well known to replace drawstrings with elastic bands.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KRISTEN C. MATTER whose telephone number is (571)272-5270. The examiner can normally be reached on Monday - Friday 9-4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Danton DeMille/  
Primary Examiner

/Kristen C. Matter/  
Examiner, Art Unit 3771